#### What is claimed is:

### 1. A near-infrared absorption film, comprising:

a transparent substrate; and

a near-infrared absorption layer which comprises a cyanine compound represented by the formula (1), and a diimonium compound,

#### Formula (1)

wherein, in the formula (1), "A" is a divalent bonding group comprising an ethylene group, " $R^{1}$ " and " $R^{2}$ " are monovalent groups containing carbon atoms, and " $X^{-1}$ " is a monovalent anion.

## 2. A near-infrared absorption film, comprising:

a transparent substrate; and

a near-infrared absorption layer which comprises a layer containing a cyanine compound represented by the formula (1); and a layer containing a diimonium compound,

# Formula (1)

wherein, in the formula (1), "A" is a divalent bonding group comprising an ethylene group, " $R^{1}$ " and " $R^{2}$ " are monovalent groups containing carbon atoms, and "X-" is a monovalent anion.

3. An near-infrared film according to Claim 1, wherein "A" is represented by at least one of the formulae (2) to (4):

$$-(CH = C)_3$$
,  $-CH = CH$ ,  $-CH = CH$   
Formula (2) Formula (3) Formula (4)

wherein, in (2) to (4), "Y" is one of an alkyl group, diphenylamino group, halogen atom and hydrogen atom.

4. A near-infrared absorption film according to Claim 1, wherein the diimonium compound is represented by at least one of the formulae (1) and (II):

$$\begin{bmatrix} R^7 \\ R^8 \end{bmatrix} N - \begin{bmatrix} R^9 \\ R^{10} \end{bmatrix}^{2+} \cdot 2X^{-}$$
 (1)

$$\begin{bmatrix} R^{7} \\ R^{8} \end{bmatrix} N \longrightarrow \begin{bmatrix} R^{9} \\ R^{10} \end{bmatrix}^{2+} \cdot Y^{2-}$$
 (II)

wherein, in the formulae (I) and (II), " $R^{7}$ " through " $R^{10}$ " are at least one of an alkyl group, an aryl group, a group containing an aromatic ring, a hydrogen atom and a halogen atom, " $X^{-1}$ " is a monovalent anion, and " $Y^{2-1}$ " is a divalent anion.

- 5. A near-infrared absorption film according to Claim 1, wherein the amount of the diimonium compound is at least 200 parts by weight relative to 100 parts by weight of the cyanine compound.
- 6. A near-infrared absorption film according to Claim 1, wherein the anion represented by "X-" in formula (1) and the anion represented by "X-" in formula (I) are identical ions.
- 7. A near-infrared absorption film according to Claim 2, wherein the near-infrared absorption layer contains a quencher compound.
- 8. A near-infrared absorption film according to Claim 7, wherein

the quencher compound is at least one of a metal compound having a structure represented by at least one of the formulae (5) and (6), and an aminium compound having a structure represented by the formula (7),

Formula (6)

wherein, in the formulae (5) and (6), "M" is at least one of Ni, Cu, Co, Pt and Pd,

$$\begin{bmatrix} R^{3} \\ R^{4} \end{bmatrix}^{1+} \cdot X^{-}$$
Formula (7)

wherein, in the formula (7), " $R^3$ " through " $R^6$ " are at least one of an alkyl group, an aryl group, a group having an aromatic ring, a hydrogen atom and a halogen atom, "X-" is at least one of I-, Br-,  $ClO_4$ -,  $BF_4$ -,  $PF_6$ -,  $SbF_6$ -,  $CH_3SO_4$ -,  $NO_3$ -, and  $CH_3$ - $C_6H_4$ - $SO_3$ -.

9. A near-infrared absorption film according to Claim 8, wherein the quencher compound is represented by at least one of the

formulae (8) to (10):

$$\begin{bmatrix} (t)Bu & S & S & Bu(t) \\ S & S & S & \end{bmatrix}^{-} (n)Bu_4N^{+}$$
Formula (8)

$$\left[\begin{array}{c|c} O_2 \\ S \\ S \\ S \\ S \\ O_2 \end{array}\right]^- \quad \text{(n)Bu}_4 N^+$$
Formula (9)

10. A near-infrared absorption film according to Claim 9, wherein the layer containing the cyanine compound contains a quencher compound represented by at least one of the formulae (7) and (10), and the layer containing the diimonium compound contains a quencher compound represented by at least one of the formulae (8) and (9).

11. A near-infrared absorption film according to Claim 2, wherein the amount of the cyanine compound is within the range of 0.1 parts by weight to 50 parts by weight relative to 100 parts by weight of the diimonium compound.